

Multiplication and Division In Euclidean Geometry.

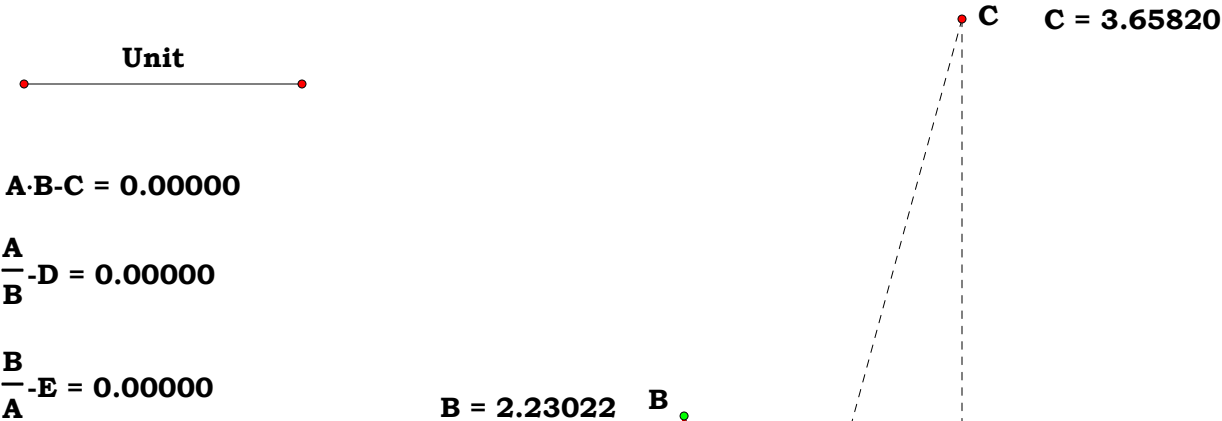
I had decided to try and solve the Delian Problem, having solved at least one impossible problem before. Along the way I came across a figure that I played with and wrote a little on in the Delian Quest by which one could multiply and divide a line by a line. I did not give it much thought because of the simplicity of the figure. It was some time before I became aware that no one was able to do multiplication of a line by a line in geometry. How absurd! How very very absurd! Why in the world would one be looking how to divide and multiply angles, or do exponential manipulation when one could not do the four basic operations of Arithmetic in Geometry!

I eventually solved the Delian Problem, but how can I expect anyone to understand the solution when they have never been able to do the simple arithmetic moves to begin with?

So, here is the figure by which, given any two line segments, one can multiply or divide one by the other. Just like in common math, the Unit must be part of the figure.

johnclark8659@hotmail.com

Multiply and Divide a Line by a Line.



johnclark8659@hotmail.com

Multiply and Divide a Line by a Line.

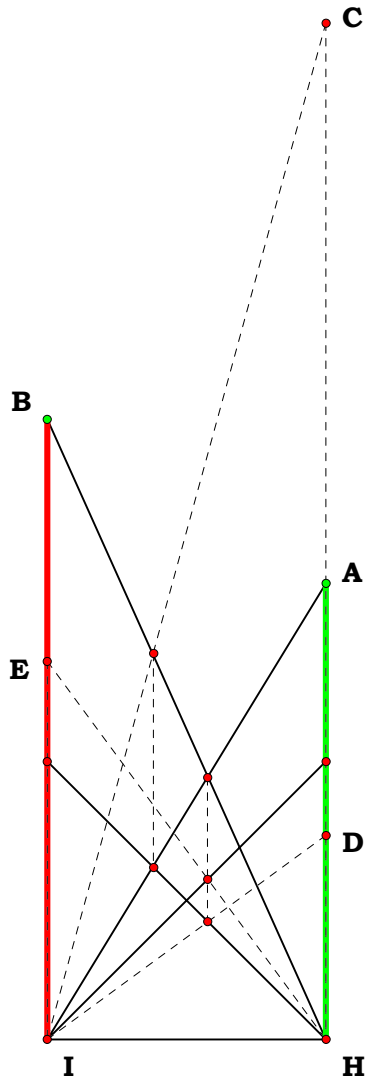
John Clark

$$HI := 3.67771 \quad \text{Unit} := HI$$

$$N_1 := 4 \quad N_2 := 3$$

$$AH := N_1 \cdot HI \quad BI := N_2 \cdot HI$$

$$JI := HI \quad HK := HI$$



$$IQ := \frac{HI^2}{AH} \quad IR := \frac{IQ \cdot HI}{HI + IQ}$$

$$LR := \frac{BI \cdot (HI - IR)}{HI} \quad CH := \frac{LR \cdot HI}{IR}$$

$$N_3 := \frac{CH}{HI} \quad N_1 \cdot N_2 - N_3 = 0$$

